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Nairobi work programme on impacts, vulnerability and adaptation to climate change

Outcomes of work under the Nairobi work programme on impacts, vulnerability and adaptation to climate change since May 2016

Synthesis report by the secretariat

Summary

This report summarizes the work of the Nairobi work programme on impacts, vulnerability and adaptation to climate change (NWP) between May 2016 and April 2018. This report is intended to inform the review of the NWP at the forty-eighth session of the Subsidiary Body for Scientific and Technological Advice. It describes the progress of the NWP as a 'knowledge-for-adaptation action' hub with over 350 partner organizations. In addition, it details specific activities that engaged diverse stakeholders in curating and disseminating actionable knowledge on climate adaptation. The NWP, through these activities, provided technical support to Parties and the constituted bodies under the Convention, identified priority knowledge gaps at the subregional level, synthesized knowledge in key thematic areas identified by Parties (e.g. human settlements, health, ecosystems and water resources, economic diversification, and indicators of climate adaptation and resilience) and fostered knowledge-sharing and learning through diverse forums and online platforms.

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I. Overview

1. Parties to the Convention continually assess climate change impacts and vulnerabilities in order to formulate adaptation plans and take appropriate actions. Adaptation knowledge gaps can hinder Parties in this work. To this end, the Nairobi work programme on impacts, vulnerability and adaptation to climate change (NWP) was established in 2005 to facilitate the development, dissemination and use of adaptation knowledge.

2. Since then, the NWP has worked towards this objective under the guidance of the Chair of the Subsidiary Body for Scientific and Technological Advice (SBSTA), responding to the needs and requests of Parties and those emerging from activities carried out in various workstreams under the Convention. In the course of the undertaking of these activities, the NWP has grown into a 'knowledge-for-action' hub operating with and through a diverse expert community of over 350 partners. Interactive and sustained engagement has mobilized the NWP network to respond to knowledge gaps and link non-Party stakeholders to constituted bodies such as the Adaptation Committee (AC) and the Least Developed Countries Expert Group (LEG). In this way, the NWP has demonstrated its ability to meet the adaptation knowledge needs of Parties as they continue their work in the context of the Paris Agreement.

3. This report summarizes the work and development of the NWP since SBSTA 44 in May 2016. Under the guidance of the SBSTA Chair, the NWP and its partners have carried out a wide range of activities in response to requests from Parties to the secretariat. First, the NWP provides ongoing technical support for the work of constituted bodies, including the AC and the LEG. Second, the NWP engages diverse stakeholders in closing knowledge gaps at the regional, national and subnational level, including through the Lima Adaptation Knowledge Initiative (LAKI) and collaboration with regional centres and networks (RCNs). Third, the NWP synthesizes knowledge and identifies gaps in the key thematic areas identified by Parties: human settlements, health, ecosystems and water resources, economic diversification, and indicators of climate adaptation and resilience. Finally, the NWP curates and disseminates actionable adaptation knowledge through interactive in-person and online exchange platforms such as the Focal Point Forum and the adaptation knowledge portal.

4. Prepared at the request of SBSTA 47,[1] this report shows how the NWP has progressed and will inform the review of the NWP at SBSTA 48.

II. Origins and objectives of the Nairobi work programme

A. Nairobi work programme as a knowledge-for-action network for climate resilience

1. Primary functions

5. The NWP was established by the Conference of the Parties (COP) at its eleventh session[2] as a mechanism to facilitate and catalyse the development, dissemination and use of knowledge that would help inform adaptation policies and practices. The objective of the programme is "to assist all Parties, in particular developing countries, including the least developed countries and small island developing States, to improve their understanding and assessment of impacts, vulnerability and adaptation, and to make informed decisions on practical adaptation actions and measures to respond to climate change on a sound, scientific, technical and socioeconomic basis, taking into account current and future climate change and variability".[3]

[1] FCCC/SBSTA/2017/7, paragraph 26.
[2] Decision 2/CP.11.
[3] Decision 2/CP.11, annex, paragraph 1.

6. Operating under the overall guidance of the SBSTA Chair, the NWP contributes to advancing adaptation implementation by providing knowledge support through four core functions, shown in figure 1 and annex I.

Figure 1
Main functions of the Nairobi work programme

• Engaging a growing network of non-Party stakeholders to share their experience and expertise
• Synthesizing the latest information and capturing knowledge on key adaptation issues
Engaging stakeholders
Synthesizing knowledge
Disseminating knowledge
Fostering collaboration
• Disseminating knowledge and fostering learning to boost adaptation action at all levels
• Fostering science–policy–practice collaboration to close knowledge gaps

7. By strengthening non-Party stakeholder engagement in a synergistic manner, the NWP has designed and implemented activities that provide technically robust knowledge support to countries. The NWP serves as a technical bridge between constituted bodies such as the AC and the LEG and non-Party stakeholders and in this way responds to climate adaptation knowledge needs identified in workstreams under the Convention. The secretariat has thus been able to support the implementation of activities despite limited financial and human resources. NWP activities also aim to catalyse innovative adaptation actions for achieving the Sustainable Development Goals (SDGs).

8. Regarding its role in synthesizing and disseminating information, the NWP has become more effective at curating actionable knowledge in a timely manner. For example, the NWP launched an open, interactive adaptation knowledge portal in 2015 for the long-term dynamic exchange of tools and knowledge on climate change adaptation.[4] The portal provides easy access to a range of tools and resources that are updated as new information becomes available.

9. Through learning and implementing mandated work, the NWP brings together diverse stakeholders to foster science–practice–policy collaboration. Applying an interactive and participatory approach, the NWP has developed partnerships with over 350 organizations, including RCNs. These partnerships provide tailored sectoral and thematic expertise, scale down adaptation knowledge to better fit the needs of countries, and identify and close knowledge gaps that otherwise hinder the implementation and scaling up of climate adaptation. For example, LAKI has engaged regional and international stakeholders in identifying a total of 85 priority knowledge gaps in six subregions.

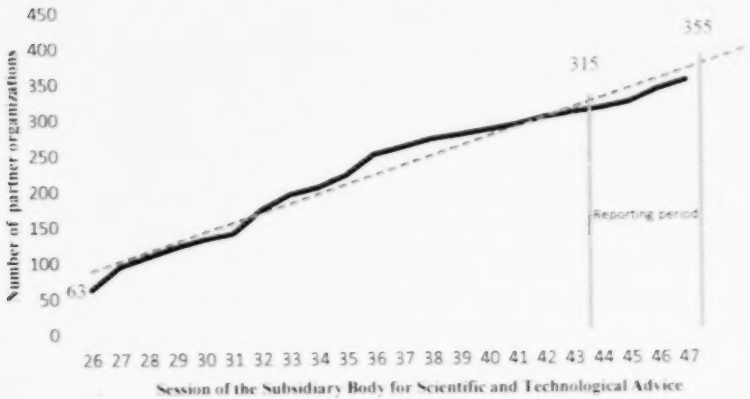
2. Nairobi work programme partner network

10. In recognition of the contribution of NWP partners to the implementation and scaling up of climate adaptation actions at all levels, SBSTA 44 requested the secretariat to strengthen the engagement of existing NWP partner organizations and the development of new partnerships.[5] Since May 2016, the NWP has approved 40 of over 60 partnership

[4] See the introductory video about the adaptation knowledge portal at http://www.youtube.com.
[5] FCCC/SBSTA/2016/2, paragraph 20(a).

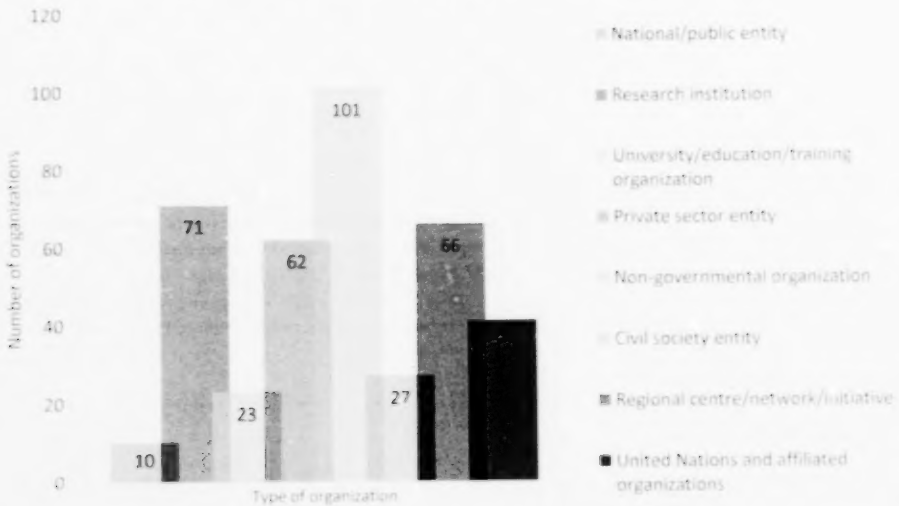
requests (see figure 2), adding to a growing and diverse network of climate adaptation expert groups.

Figure 2
Nairobi work programme partner organizations



11. Together, the more than 350 partners of the NWP cover a wide range of organization types (see figure 3) and reinforce the main functions of the NWP (see figure 1). NWP partner organizations also have extensive expertise in the thematic areas covered under the current work of the NWP or identified as emerging needs for Parties or the workstreams under the Convention (see annex III).

Figure 3
Overview of Nairobi work programme partners by organization type



B. Milestones and mandates

12. The Third Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)[9] made clear the need for adaptation planning and implementation, timely information-sharing, and collaboration between diverse stakeholders. The COP established the NWP in

[9] Available at https://www.ipcc.ch/ipccreports/tar/

2005 by decision 2/CP.11 and agreed in 2013 to continue the work programme by decision 17/CP.19 in order to respond to the knowledge needs identified by Parties and arising from the implementation of the Cancun Adaptation Framework and other relevant workstreams under the Convention (see annex II). At COP 21, Parties noted the potential role of the NWP in the implementation of the Paris Agreement.

13. SBSTA 44,[7] in May 2016, took stock of the progress made under the NWP and recognized the role of the SBSTA in providing support in the areas of adaptation knowledge and related stakeholder engagement to other workstreams and constituted bodies under the Convention. The SBSTA noted the potential role the NWP could play in new processes under the Paris Agreement. In this regard, the SBSTA invited the AC, the LEG and other relevant bodies, in accordance with their mandates and functions, to consider providing recommendations for activities under the NWP to support these processes.

14. SBSTA 44 concluded that NWP activities should integrate the consideration of vulnerable communities in addition to gender issues, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, and the role of and impacts on ecosystems, where appropriate. The SBSTA requested the NWP to conduct technical work on health, human settlements, ecosystems and water resources, and economic diversification.

15. SBSTA 44 invited Parties, NWP partner organizations and other relevant organizations to submit information on indicators of adaptation and resilience at the national and/or local level or for specific sectors. The SBSTA requested the secretariat to use those submissions to inform the meeting the AC agreed to convene in 2018 for exchanging views on national adaptation goals and indicators and how they relate to goals and indicators for sustainable development and disaster risk reduction in the context of the Sendai Framework for Disaster Risk Reduction 2015–2030.[8] The SBSTA invited the AC and the LEG to consider the submissions to help inform their work on reviewing the effectiveness and adequacy of climate adaptation.

16. SBSTA 44 also concluded that the NWP, under the guidance of the SBSTA Chair and with the support of the secretariat, would carry out the actions that the SBSTA considered to be ways to enhance the effectiveness of the modalities of the NWP (see figure 4). The SBSTA requested that these actions be undertaken subject to the availability of financial resources.

17. SBSTA 45[9] and 46[10] requested the secretariat to further enhance the role of the NWP as an adaptation knowledge hub; explore opportunities for engaging Parties, NWP partners and other relevant entities; and strengthen linkages of the NWP with the SDGs. Parties recognized the ongoing contributions of the NWP and its partner organizations. At the opening plenary meeting of SBSTA 46, Mali, on behalf of the African Group, expressed its support for the strengthened role of the NWP. The group emphasized the role of the NWP as a knowledge hub that enhances action on adaptation and noted the potential role the NWP could play in new processes under the Paris Agreement. The group further stated its belief in the importance of the NWP for closing adaptation knowledge gaps at the subnational and national level by fostering collaboration among, inter alia, policymakers, research and scientific communities, including the IPCC, practitioners and financial institutions.[11]

[7] FCCC/SBSTA/2016/2, paragraphs 12–21.
[8] See the annex to document FCCC/SB/2015/2.
[9] FCCC/SBSTA/2016/4, paragraph 19.
[10] FCCC/SBSTA/2017/4, paragraphs 17 and 19.
[11] The statement by Mali is available at http://www4.unfccc.int/Submissions/Lists/OSPSubmissionUpload.pdf.

Figure 4
Ways to enhance the effectiveness of the Nairobi work programme modalities

Strengthening the engagement of existing NWP partner organizations and developing diverse new partnerships
Improving the consideration of gender issues and the inclusion of traditional knowledge, knowledge of indigenous peoples and local knowledge systems in tools and methods for adaptation planning processes
Improving access to and usability of knowledge for end users
Communicating with NWP partner organizations and other relevant organizations on the process to formulate and implement national adaptation plans in collaboration with the Adaptation Committee and the Least Developed Countries Expert Group
Enhancing the participation of the UNFCCC national focal points
Engaging regional centres and networks in undertaking knowledge-sharing and training activities and disseminating the outcomes at the regional, national and subnational level

Source: FCCC/SBSTA/2016/2

Abbreviation: NWP = Nairobi work programme on impacts, vulnerability and adaptation to climate change.

18. SBSTA 47 welcomed opportunities for the NWP to contribute to the work of constituted bodies under the Convention. It requested the secretariat to replicate the interactive approach to the Focal Point Forum and related activities. This forum enhances the engagement of experts and organizations in responding to Parties' climate adaptation knowledge needs; provides an interactive space for information-sharing and the informal exchange of views among Parties and non-Party entities; and facilitates collaboration and partnerships among NWP partner organizations, Parties and other relevant entities. The SBSTA also welcomed the significant efforts made under LAKI and supported the enhancement of communication in the next phase of LAKI to raise awareness of the knowledge gaps further.[12]

19. To help improve the relevance and effectiveness of the NWP, SBSTA 47 requested Parties to consider ways to enhance the engagement of NWP partner organizations.[13] Parties considered that such engagement could better link partners' workplans to activities under the NWP, thus helping to deliver NWP mandates and strengthen the relevance of the NWP to the work of the constituted bodies and workstreams in the context of the Paris Agreement.

[12] FCCC/SBSTA/2017/7, paragraphs 15, 20 and 21.
[13] FCCC/SBSTA/2017/7, paragraph 23.

III. Building climate adaptation and resilience in countries through innovation and partnership

A. Institutional linkages of the Nairobi work programme in the UNFCCC process

1. Supporting the work of the Adaptation Committee

20. The NWP began providing technical support to the AC shortly after the AC took up its work in 2012, and the collaborative relationship has grown stronger over the years.[14]

21. COP 16 decided that the AC should promote synergies with the NWP and strengthen stakeholder engagement. Accordingly, the AC has routinely invited the NWP and its partner organizations,[15] along with the Climate Technology Centre and Network (CTCN), to prepare an overview of the landscape of existing technical support platforms for developing country Parties on climate change adaptation.

22. The NWP and the CTCN compiled a list of 45 relevant initiatives, programmes and mechanisms as well as 30 international financial institutions that qualify as platforms.[16] The 45 platforms are hosted by different types of organization and operate on a partnership and/or membership basis (see figure 5). The NWP, on behalf of its partners, presented the database and initial analysis at AC 12.

Figure 5
Platforms by host organization and operational type

Source: Adaptation Committee document AC/2017/14

23. One key finding of the review is that, although there is not an immediate need for a new global platform, more clarity on the features of existing platforms is desired. For example, information on their modalities, areas of technical support, sectors covered and possible beneficiaries could help facilitate collaboration and prevent duplicated efforts. In this way, the NWP contributes to the efficacy of the AC and avoids duplication of effort.

[14] See https://unfccc.int/files/adaptation/application/pdf/or_highres.pdf.
[15] FCCC/SB/2017/2, paragraph 23.
[16] See AC document AC/2017/4.

24. The AC expressed its appreciation for the review coordinated under the NWP and by NWP partner organizations and the CTCN. It requested the secretariat to make the initial analysis and overview available on the NWP adaptation knowledge portal in a user-friendly format and to report on progress made at AC 13 in 2018. The AC invited organizations already listed in the overview to regularly update their information. It also requested NWP partners and the CTCN to widely promote the database.[17] The secretariat under the NWP is currently working with information technology colleagues at the secretariat and the CTCN to deliver on these requests.

25. The AC looks forward to working on its future activities closely with the NWP.[18] The submissions from NWP partner organizations and Parties on the topic of indicators for adaptation and resilience, as well as economic diversification, can feed directly into the efforts of the AC to enhance climate adaptation (see paras. 56 and 57 below). The AC also aims to engage the NWP and its partner organizations in its annual technical examination process on adaptation.

2. Supporting the work of the Least Developed Countries Expert Group

26. The LEG also seeks technical support from the NWP and its partners. The NWP provides ongoing technical support to the work of the LEG through organizing joint events and preparing and disseminating knowledge resources.

27. In July 2016, the LEG, with the support of the secretariat, organized a technical session on the margins of the NAP Expo in the context of the NWP to discuss how vulnerable communities and ecosystems could be better integrated into national adaptation planning and implementation. An information paper was prepared under the NWP to further this discussion.

28. SBSTA 45 welcomed the activities undertaken by the secretariat in collaboration with NWP partner organizations and other relevant entities and requested the NWP to continue its technical work on ecosystems jointly with the LEG.[19] In response, the NWP invited its partner organizations, Parties and other relevant organizations to share their experience and expertise pertaining to ecosystem-based climate adaptation. The NWP, in collaboration with members of the Friends of Ecosystem-based Adaptation (FEBA) network, compiled and analysed a total of 45 submissions. The analysis was later published in a report[20] for consideration at SBSTA 46.

29. The report points out that healthy ecosystems play an essential role in increasing the resilience of people to climate change. A changing climate, however, can damage the ability of ecosystems to provide life-supporting services and protect communities from climate-related stresses. Climate adaptation therefore needs to strengthen the resilience of both communities and ecosystems.

30. Some of the challenges identified in the report include: gaps in scientific information, particularly baseline conditions and local-level projections; difficulties collecting relevant data for effective monitoring of ecosystem-based adaptation interventions; short-term national policy cycles that do not align with the long-term temporal requirements of ecosystem-based adaptation; and low awareness and understanding of ecosystem-based adaptation among stakeholders. Opportunities identified in the report include effective and audience-specific communication that informs stakeholders of the benefits and limitations of ecosystem-based adaptation as well as capacity-building and access to resources for implementing it.

31. The report presented a range of good practices and lessons learned in monitoring and evaluating ecosystem-based adaptation, as well as tools for assessing its benefits for strengthening resilience and reducing emissions.

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[17] FCCC/SB/2017/2, paragraph 56.

[18] See https://unfccc.int/files/adaptation/application/pdf/ot_highres.pdf.

[19] FCCC/SBSTA/2016/4, paragraph 16.

[20] FCCC/SBSTA/2017/3.

32. Parties considered the outcomes of NWP activities related to ecosystems and adaptation at SBSTA 46 and determined that there could be further opportunities under the NWP for fostering science–policy–practice collaboration to reduce climate risks for ecosystems and to enhance overall resilience, including through ecosystem-based adaptation.

33. An NWP side event with the LEG and FEBA was held at SBSTA 46 to disseminate these findings, focusing on the role of healthy ecosystems in helping people adapt to climate change. The event provided a unique avenue to bridge the expertise of NWP partners and other relevant organizations with what developing countries need in terms of technical expertise. The discussions provided relevant information for building the climate resilience of ecosystems and integrating ecosystem-based adaptation into national adaptation plans (NAPs) and national development plans.

34. In recognition of the ongoing technical support provided under the NWP, the LEG agreed to deepen the collaborative relationship with NWP partner organizations through various activities, including training via the NAP Expo, NAP Central and Open NAPs, as well as providing general technical support to the least developed countries (LDCs).[21]

3. Lessons learned

35. Informal linkages with constituted bodies such as the AC and the LEG have enabled the NWP and its partner organizations to respond to Parties' climate adaptation knowledge needs on a case-by-case basis, especially those of vulnerable LDCs and small island developing States (SIDS). A long-term official arrangement between the NWP and constituted bodies under the Convention could help strengthen the usefulness of the NWP and its partner organizations in supporting Parties with knowledge relevant to adaptation planning and implementation. Such strengthening would enhance the legitimacy of the NWP as the go-to knowledge hub for climate adaptation. It would also unlock the potential of NWP partner organizations to engage effectively and give them a longer time-horizon for bringing their support to the process. Clarity and stability of institutional linkages between the NWP and constituted bodies become more important as the NWP and its partner organizations stand ready to assume their role in supporting Parties in the successful implementation of the Paris Agreement.

B. Closing knowledge gaps at the regional level

1. Lima Adaptation Knowledge Initiative

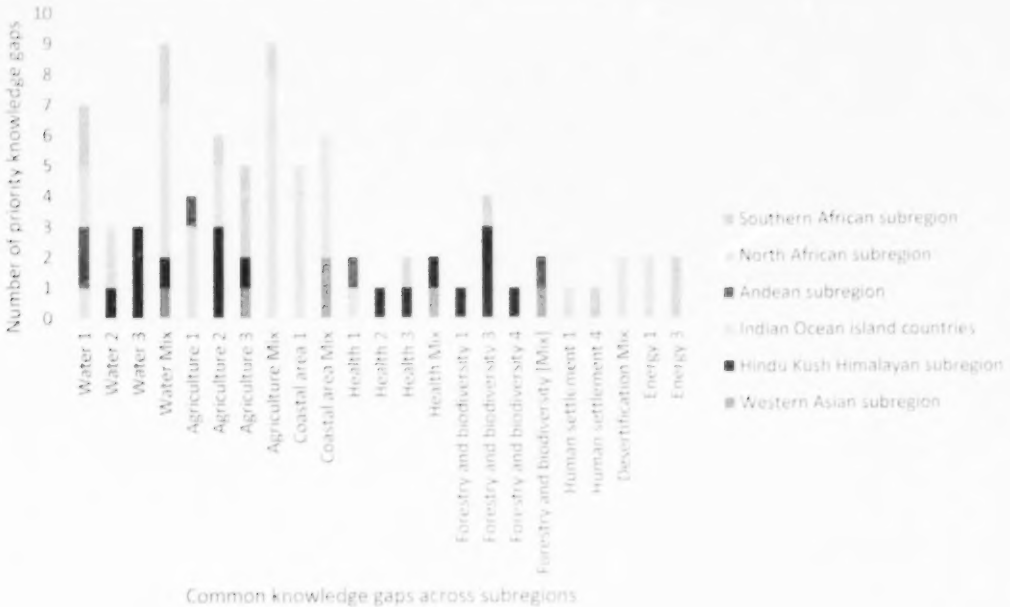
36. LAKI[22] is a joint action pledge under the NWP of the secretariat and the United Nations Environment Programme that aims to address knowledge barriers to the implementation and scaling up of climate change adaptation actions. During the first phase of the initiative (2014–2017), LAKI engaged stakeholders from six subregions and identified a total of 85 priority knowledge gaps (see figure 6). These priority knowledge gaps cover 38 countries, including 3 SIDS, 11 LDCs and 13 African States.

37. The NWP is currently working with its partner organizations, including the United Nations Environment Programme, the International Centre for Integrated Mountain Development and the University of Michigan, to help bridge these knowledge gaps and implement the LAKI process in more subregions across the world.

[21] FCCC/SBI/2016/18, paragraph 61.

[22] See http://www4.unfccc.int/sites/NWP/Pages/nwp.

Figure 6
Outcomes of phase I of the Lima Adaptation Knowledge Initiative



Source: Lima Adaptation Knowledge Initiative priority-setting workshops (2014–2016).

Note: 1 = lack of data, 2 = lack of access to data, 3 = lack of actionable knowledge (e.g. in need of repackaging existing knowledge), 4 = lack of tools/methods to process knowledge into actionable form, Mix = a combination of two or more of the four knowledge-gap clusters.

2. Regional centres and networks

38. The SBSTA considers the engagement of RCNs in knowledge-sharing and training activities as well as the dissemination of outcomes at the regional, national and subnational level as ways to enhance the effectiveness of the NWP modalities.[23] Under the NWP, therefore, 68 submissions on knowledge-sharing activities undertaken by RCNs in 2016 (see figure 7) were compiled and analysed.

39. Thirteen RCNs and eight international organizations with regional presence, including 19 NWP partner organizations, contributed the submissions.[24] The submissions suggested that RCNs carried out significant work, in collaboration with other organizations and at different levels of government, to help inform adaptation planning processes at multiple scales.

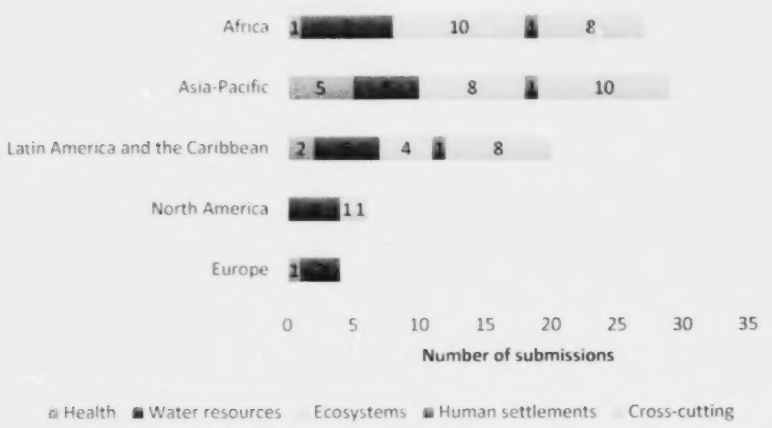
40. Through this work, RCNs enhance understanding of climate change adaptation challenges and opportunities in diverse sectors; strengthen stakeholder engagement in implementing adaptation measures and activities; and reinforce national, regional and international collaboration on climate change adaptation.

41. The submissions suggested that there are clear knowledge-sharing and training gaps, as the consideration of gender issues and the inclusion of local, indigenous and traditional practices in adaptation seem to be rarely taken into account.[25]

[23] FCCC/SBSTA/2016/2, paragraph 20(d).
[24] FCCC/SBSTA/2016/INF.1.
[25] FCCC/SBSTA/2016/INF.1, paragraph 71.

Figure 7

Distribution of submissions on knowledge-sharing activities to the Nairobi work programme by regional focus and primary thematic area



Source: FCCC/SBSTA/2016/INF.1.

3. Next steps

42. The NWP is poised to continue engaging RCNs through LAKI and other activities, as welcomed by the SBSTA.[26] Both the RCN report[27] and LAKI identified clear adaptation knowledge and capacity gaps at the subregional and regional level. Potential next steps include enhancing the engagement of RCNs and international organizations under the NWP to close gaps through knowledge-sharing and training activities that respond to the most pressing needs of policymakers, affected populations and other targeted stakeholder groups.

C. Closing knowledge gaps in thematic areas identified by Parties

1. Activities and outcomes in the human settlements thematic area

43. SBSTA 44 requested the secretariat to prepare a document summarizing initiatives in the area of human settlements for consideration at SBSTA 46.[28] The SBSTA invited Parties, NWP partner organizations and other relevant entities to submit information on recent activities and research on human settlements related, in particular, to assessing sensitivity and vulnerability to climate change, integrating both short-term and long-term climate considerations, the role of national governments in supporting adaptation at the local level, city-to-city partnerships on climate change, and cross-cutting issues and linkages related to the formulation and implementation of NAPs.

44. SBSTA 44 requested the secretariat to use the submissions to inform the 11th Focal Point Forum. With a standardized stepwise approach (see figure 8), the NWP has been engaging experts and organizations, including those from developing countries, to compile a report on human settlements and advance subsequent work on human settlements in adaptation planning and implementation.

[26] FCCC/SBSTA/2016/4, paragraph 13(d), and FCCC/SBSTA/2017/2, paragraph 10.
[27] FCCC/SBSTA/2016/INF.1.
[28] FCCC/SBSTA/2016/2, paragraph 15(b).

Figure 8
Evolution of functions in the thematic area of human settlements featuring the seven-step approach of the Nairobi work programme

Source: FCCC/SBSTA/2018/3.
Abbreviation: COP = Conference of the Parties.

45. With input from its partner organizations and other relevant experts, a report was prepared under the NWP for consideration at SBSTA 48.[29] In November 2017, a technical dialogue was co-convened under the NWP[30] with human settlements experts prior to COP 23 to complement the Focal Point Forum. SBSTA 47 welcomed the outcomes of the technical dialogue and Forum[31] for their contribution to enhancing expert engagement, including experts from developing countries, providing an interactive space for information-sharing, and facilitating collaboration and partnership among NWP partner organizations, Parties and other relevant organizations.

46. Efforts under the NWP to better integrate human settlements into national climate adaptation actions received positive feedback from Parties, NWP partner organizations and other relevant entities. The United Nations Human Settlements Programme (UN-Habitat), an NWP partner organization, agreed to collaborate with the LEG and other interested groups to develop a supplement to the NAP guidelines on advancing the integration of human settlements into national adaptation planning and implementation. The NWP and UN-Habitat are also exploring opportunities to jointly develop a knowledge product based on the report referred to in paragraph 45 above.

47. A side event will be convened under the NWP at SBSTA 48 to engage Parties and relevant entities in discussing next steps for the thematic area of human settlements.

48. Recently, UN-Habitat and the LEG have begun to explore a collaboration to develop a supplement to the NAP guidelines on advancing the role of human settlements in national adaptation planning and implementation processes.

2. Activities and outcomes in the health thematic area

49. Recognizing the adverse effects of climate change on human health, Parties agreed in May 2016 to undertake concrete activities addressing health under the NWP in order to inform adaptation planning and actions at the regional, national and subnational level.

50. In response, a range of activities were undertaken under the NWP to advance action through knowledge to address human health. As a first step, a mapping exercise identified health experts and expert institutions. These experts were contacted along with NWP and UNFCCC focal points and requested to share their experience and expertise through a call for submissions.

51. Fourteen Parties, a group of Parties, and 12 organizations, including 8 NWP partner organizations, contributed a total of 27 submissions.[32] These submissions focused on recent

[29] FCCC/SBSTA/2018/3.
[30] See http://unfccc.int/adaptation/nairobi_workprogramme/workshops_and_meetings/items/10447.php.
[31] FCCC/SBSTA/2017/7, paragraph 19.
[32] Submissions from Parties are available at http://www4.unfccc.int/submissions/SitePages/sessions.aspx?showOnlyCurrentCalls=1&populate=at

work in the area of climate change impacts on human health, including the geographical distribution of certain diseases, new and emerging health issues, and the effects of climate change on health and productivity in the workplace, with implications for occupational health and safety and social protection.

52. As requested at SBSTA 44,[33] these submissions helped to inform the 10th NWP Focal Point Forum. Together with the submissions and input from Forum participants, including the World Health Organization, the NWP in collaboration with its partner organizations prepared a synthesis report.[34]

53. Some of the next steps identified in the report are enhancing research and health information systems, adopting a comprehensive approach to integrating health into climate adaptation plans, developing capacity for health-care workers and institutions in order to develop climate-resilient health-care systems, strengthening intersectional action and multilevel governance, promoting climate-resilient and sustainable health infrastructure and technologies, and scaling up financial investments and flows towards adaptation plans and actions addressing health.

54. SBSTA 46 welcomed the synthesis report, noted the contribution of NWP activities to the SDGs (see annex IV), and requested the secretariat to continue exploring ways to further disseminate the outcomes of NWP activities to facilitate knowledge transfer to constituted bodies, Parties and other relevant entities.[35]

3. Activities and outcomes in the ecosystems and water resources thematic area

55. SBSTA 45 mandated the NWP to continue its technical work on ecosystems jointly with the LEG (see paras. 27–33 above, which detail the outcomes of this work).

4. Activities and outcomes in the economic diversification and indicators of adaptation and resilience thematic areas

56. SBSTA 44 invited Parties, NWP partners and other relevant organizations to submit, by 20 September 2017, information on lessons learned and good practices relating to adaptation actions and plans that could enhance economic diversification and have mitigation co-benefits. The SBSTA also invited NWP partners and other relevant organizations, including the IPCC, to submit to the secretariat information on indicators of adaptation and resilience at the national and/or local level or for specific sectors.[36] In response, the NWP issued calls for submissions in July 2017 and received a total of 14 submissions on economic diversification and 19 submissions on indicators of adaptation and resilience.

57. The NWP is currently collaborating with the AC to use these submissions to help inform the upcoming AC workshop on indicators and the technical examination process on adaptation. Work under the NWP to compile and synthesize the reports into miscellaneous documents that will be made available via the NWP adaptation knowledge portal is under way.

5. Next steps

58. As the activities of the NWP continue in the thematic areas, the aim is to build on the existing work of the programme and its partner organizations and enhance opportunities for sustained engagement with non-Party stakeholders in responding to the adaptation knowledge needs of Parties and those arising from the implementation of workstreams under the Convention and the Paris Agreement.

[33] FCCC/SBSTA/2016/2, paragraph 15(a).
[34] FCCC/SBSTA/2017/2.
[35] FCCC/SBSTA/2017/4, paragraph 20.
[36] FCCC/SBSTA/2016/2, paragraphs 15(d) and 18.

D. Disseminating knowledge and fostering learning to boost climate adaptation action at all levels

1. Focal Point Forum

59. The 11th annual NWP Focal Point Forum, convened under the NWP on the margins of COP 23, was recognized by Parties for its effective engagement of stakeholders, including those from developing countries. The SBSTA encouraged the secretariat to replicate the interactive and collaborative design of the 11th Forum to enhance its effectiveness as a space for knowledge-sharing and partnership development.[37]

2. Adaptation knowledge portal

60. The adaptation knowledge portal was created as an open and participatory resource that promotes the multidirectional and timely flow of curated information and fosters global learning opportunities. As at 7 March 2018, the portal provided access to 365 case studies, 311 tools and methods, and many other knowledge resources covering a wide range of adaptation areas (see the table below).[38] The resources in the database are regularly updated and include country-level vulnerability assessments of food security, gender-sensitive screening tools for climate resilience, vulnerability and adaptation assessments for the health sector, geospatial information technology for capturing indigenous peoples' and rural communities' knowledge of local ecosystems, and spatial tools for river basin management.

61. Since tracking of traffic to the adaptation knowledge portal began in October 2016, more than 9,400 users have visited the portal and about 32,500 pages have been viewed, underscoring the progress under the NWP in developing the portal into a go-to hub for climate adaptation knowledge.

Overview of the knowledge resources available on the adaptation knowledge portal

Thematic area of resource	*Total*	*Health*	*Ecosystems and water resources*	*Human settlements*	*Indicators*	*Economic diversification*
Case studies	365	67	148	63	17	13
Tools and methods	311	89	118	62	19	2
Online portals	37	19	12	10	1	0
Policy briefs	7	2	2	2	0	0
Technical documents and reports	57	14	18	13	1	1

Source: http://www.unfccc.int/sites/NWP/Pages/Search.aspx.
Note: Data correct as at 7 March 2018.

3. Online communication channels

62. Efforts under the NWP in disseminating knowledge for climate adaptation action have been strengthened by developing and circulating e-newsletters and engaging stakeholders through numerous social media accounts operated by the secretariat and under the NWP. The NWP newsletter, eUpdate,[39] is published three times a year and highlights recent and noteworthy NWP activities, shares opportunities for engagement with the UNFCCC adaptation programme, and solicits feedback on how the NWP could better support Parties and constituted bodies under the Convention. The latest edition, released in December 2017, features the operationalization of the local communities and indigenous people platform.[40]

[37] FCCC/SBSTA/2017/7, paragraph 20.
[38] Available at http://www4.unfccc.int/sites/NWP/Pages/Search.aspx.
[39] Available at http://unfccc.int/adaptation/knowledge_resources/newsletters/items/7565.php.
[40] See http://newsroom.unfccc.int/paris-agreement/new-un-platform-to-boost-indigenous-peoples-and-local-communities-climate-action/.

the 11th NWP Focal Point Forum on adaptation and resilience of human settlements, and the outcomes of the first phase of LAKI.

63. In addition to its own communication channels, the NWP facilitates knowledge-sharing and learning through the UNFCCC communication platforms, including the Adaptation Exchange Facebook page (close to 15,000 followers), the UNFCCC climate conference YouTube channel (over 5,000 followers), the UNFCCC Newsroom, and the UNFCCC Twitter (about 466,000 followers) and Facebook (over 460,000 followers) accounts.

4. Next steps

64. In response to feedback from Parties, efforts are being made under the NWP to design knowledge-exchange platforms that are increasingly interactive and action-oriented in order to better fulfil its mandate to facilitate the development, dissemination and use of adaptation knowledge.

IV. Conclusions

65. The activities reported on herein build on efforts spanning over a decade focused on bridging adaptation knowledge between Parties and NWP partners. The NWP has worked to facilitate knowledge development and dissemination and to engage diverse stakeholders in helping to inform Parties' climate change adaptation policies and programmes and support the implementation of workstreams under the Convention. The reporting period has seen the NWP mature further into a knowledge-for-action hub for climate resilience.

66. Its diverse network of over 350 partner organizations is ready and well positioned to respond to the climate adaptation knowledge needs of Parties, especially those of developing countries and the LDCs, and to support the NWP in providing a strategic technical arm for the implementation of workstreams under the Convention and the Paris Agreement.

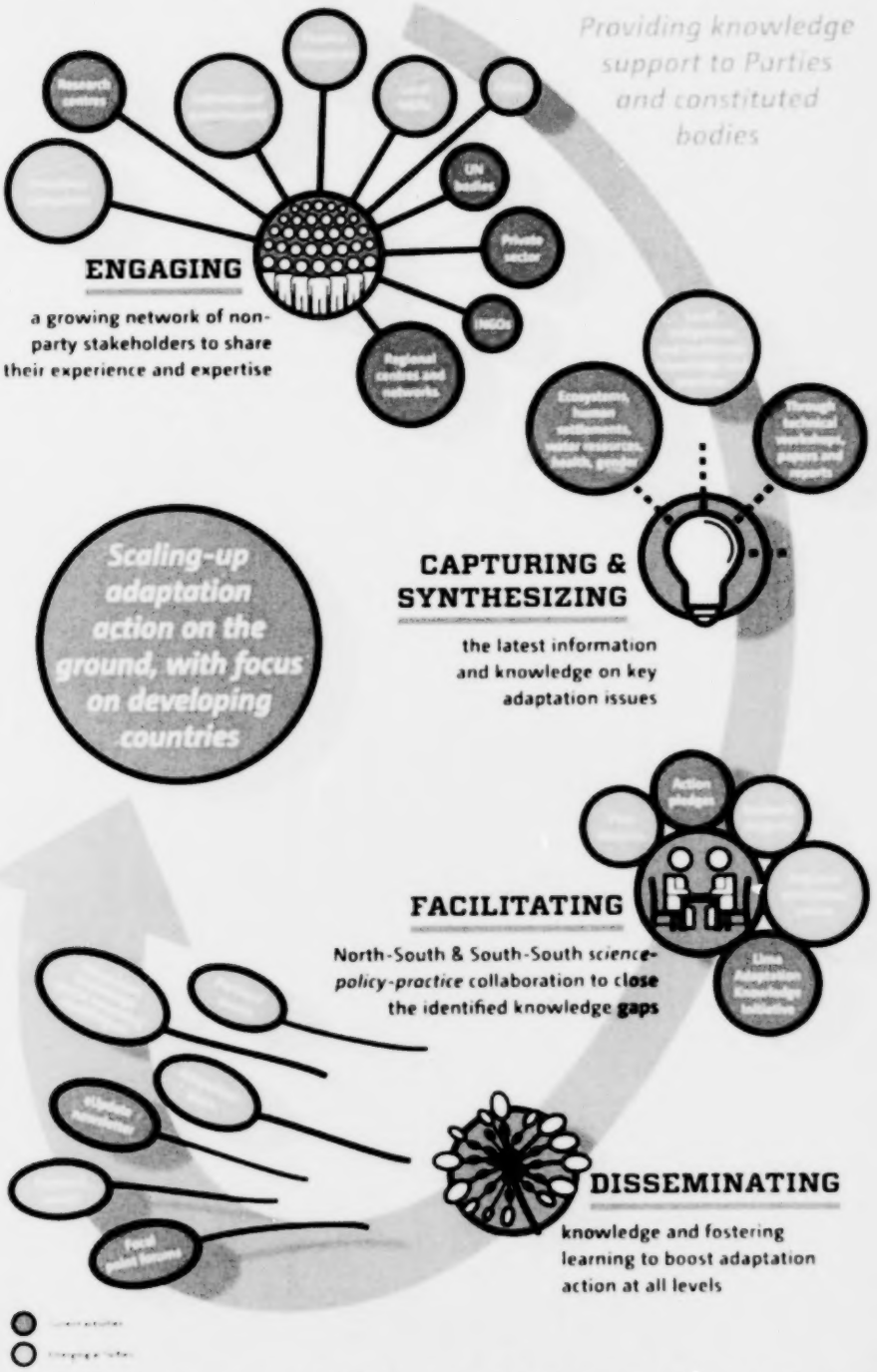
67. The NWP has evolved from improving the accessibility of knowledge through synthesis reports to identifying and addressing knowledge gaps that hinder the implementation and scaling up of climate adaptation actions. Its modalities, including the functions of the adaptation knowledge portal, have transformed from repositories of tools and knowledge to interactive platforms where Parties and relevant entities regularly share, update and acquire knowledge.

68. The open and participatory nature of the NWP is most noticeable and effective when accompanied by clear mandates from Parties regarding their climate adaptation knowledge needs and long-term avenues for the NWP and its partner organizations to respond to those needs.

69. In sum, mandates from the SBSTA have enhanced the relevance and effectiveness of the NWP to achieve its objectives. The NWP has distilled global adaptation knowledge to fill subregional knowledge gaps. It has considered thematic areas such as health, human settlements, and ecosystems and water resources, contributed to the workplans of constituted bodies, and supported the NAP process. These and other NWP activities have made a significant contribution to supporting Parties in climate adaptation work. They also provide ideas for consideration in the review of the NWP at SBSTA 48.

Annex I

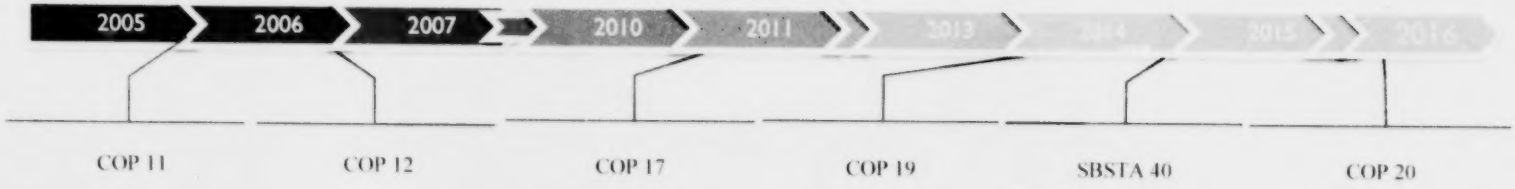
Main functions of the Nairobi work programme


Providing knowledge support to Parties and constituted bodies
ENGAGING
a growing network of non-party stakeholders to share their experience and expertise
CAPTURING & SYNTHESIZING
the latest information and knowledge on key adaptation issues
Scaling-up adaptation action on the ground, with focus on developing countries
FACILITATING
North-South & South-South science-policy-practice collaboration to close the identified knowledge gaps
DISSEMINATING
knowledge and fostering learning to boost adaptation action at all levels

Source: http://unfccc.int/files/adaptation/workstreams/nairobi_work_programme/application/pdf/banner_nwp.pdf.

Annex II

Chronology of the Nairobi work programme



Establishing a mechanism to facilitate and catalyse the development, dissemination and use of information and knowledge to inform and support adaptation policies and practices.

Establishing a five-year programme of work on impacts, vulnerability and adaptation structured around nine thematic areas.

For more details, see decision 2/CP.11, paragraphs 1–6.

Renaming the five-year work programme as the Nairobi work programme on impacts, vulnerability and adaptation to climate change (NWP).

Establishing the NWP to serve as a knowledge hub on adaptation to respond to knowledge needs identified by Parties and arising from the implementation of the Cancun Adaptation Framework (CAF) and other relevant workstreams and bodies under the Convention.

Recognizing the need for the NWP to support technical and scientific work under the CAF.

For more details, see decision 6/CP.17, paragraphs 1–16.

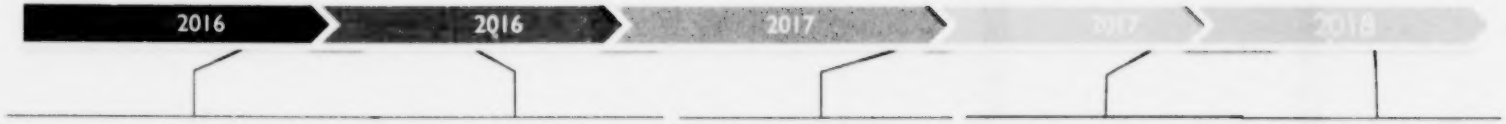
Continuing the NWP to respond to the knowledge needs arising from the CAF.

Focus on water, ecosystems, human settlements and human health.

For more details, see decision 17/CP.19, paragraph 1.

Calling for enhanced collaboration with global and regional centres and networks under the NWP.

Endorsing the Lima Adaptation Knowledge Initiative (LAKI) for prioritizing and catalysing responses to subregional and theme-specific adaptation knowledge gaps.



SBSTA 44

The Subsidiary Body for Scientific and Technological Advice (SBSTA) recognized the role of the NWP in providing support in the areas of adaptation knowledge and related stakeholder engagement to other workstreams and constituted bodies under the Convention and noted the potential role it can play in new processes under the Paris Agreement and decision 1/CP.21. In this regard, the SBSTA invited the Adaptation Committee, the Least Developed Countries Expert Group and other relevant bodies, in accordance with their mandates and functions, to consider providing recommendations for activities to be undertaken under the NWP in supporting these processes (FCCC/SBSTA/2016/2, para. 13).

SBSTA 45

The SBSTA concluded that the activities under the NWP should be implemented in a way that enhances the role of the NWP as a knowledge hub, supporting enhanced action on adaptation (FCCC/SBSTA/2016/4, para. 18).

SBSTA 46

The SBSTA noted the contribution of the NWP in strengthening partnerships with and among Parties through their national focal points, and advancing the United Nations Sustainable Development Goals (SDGs) (FCCC/SBSTA/2017/4, para. 17). The SBSTA requested the secretariat to continue to explore ways to develop linkages with the SDGs and further disseminate the outcomes of the activities undertaken under the NWP to facilitate the transfer of knowledge to constituted bodies, Parties and other relevant entities (FCCC/SBSTA/2017/4, para. 20).

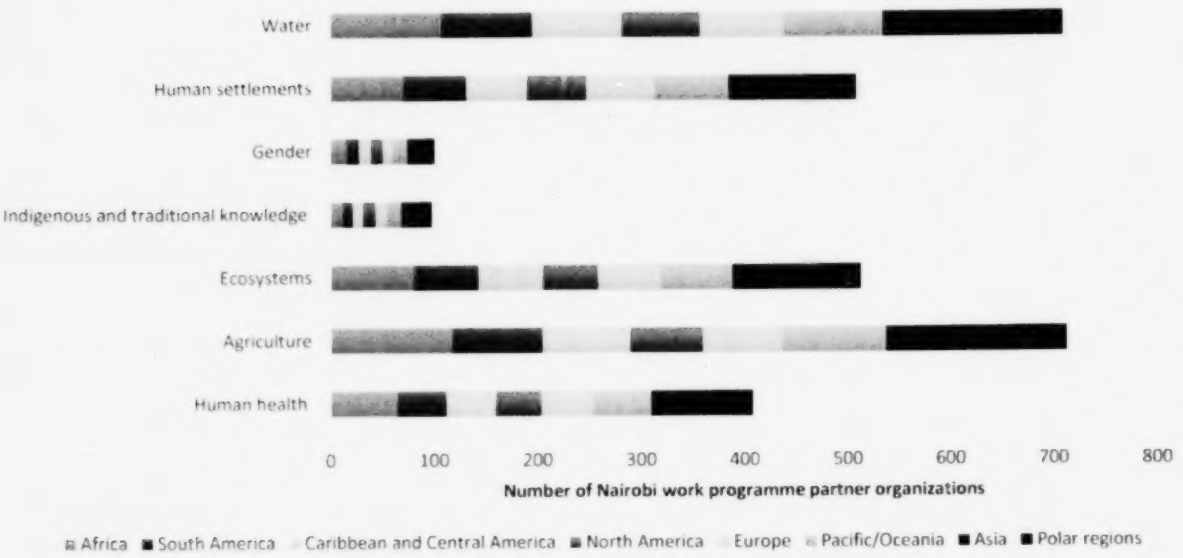
SBSTA 47

The SBSTA requested the secretariat to replicate modalities that help enhance the effectiveness of the NWP annual Focal Point Forum, expressed support for enhanced communication in the second phase of LAKI, and invited Parties and other relevant entities to share their views on further improving the relevance and effectiveness of the NWP. The SBSTA noted that the submissions will inform the review of the NWP at SBSTA 48.

SBSTA 48

Annex III

Nairobi work programme partner organizations by thematic area



Annex IV

Developing and strengthening linkages of the Nairobi work programme with the Sustainable Development Goals

Goal	*Target*	*Nairobi work programme activities*
Goal 1: end poverty in all its forms everywhere	Target 1.5: "build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters"	Many NWP partners have been working on activities that enable countries and regions to develop knowledge, build resilience and adapt to the impacts of climate change, as well as advance sustainable development. The vital linkage between adaptation and the implementation of the 2030 Agenda for Sustainable Development is reflected in recent NWP conclusions. The NWP activities in the thematic areas of human settlements, health, ecosystems and water resources, economic diversification, and indicators of climate adaptation and resilience as well as the work undertaken under LAKI have collectively contributed towards several Sustainable Development Goals. The secretariat, along with partners, has identified knowledge gaps around water, agriculture and fisheries, the health and proper management of which are vital to building the resilience of the poor.
Goal 2: zero hunger	Target 2.4: "ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems and that strengthen capacity for adaptation to climate change"	The secretariat, through LAKI, has helped to identify knowledge gaps around agriculture and fisheries that hinder the implementation and scaling up of climate adaptation actions. The secretariat has hosted a joint event to elevate the importance of healthy ecosystems in enhancing climate change adaptation actions.
Goal 3: good health and well-being	Target 3.D: "strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks"	The secretariat's synthesis report on human health and adaptation has contributed to raising awareness and improving learning in countries on climate change related health risks. The adaptation knowledge portal facilitates the production and dissemination of knowledge on health.
Goal 5: gender equality	Target 5.5: "ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life"	The secretariat, through its growing network of partners, has compiled over 100 knowledge resources on gender-sensitive approaches and tools for climate change adaptation. Thirty-three NWP partner organizations work on gender-related climate adaptation.
Goal 6: clean water and sanitation	Target 6.A: "expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes"	The adaptation knowledge portal has a dedicated thematic page on water resources. The secretariat, through the LAKI priority-setting workshops, has helped to identify water-related knowledge gaps spanning 38 countries and six subregions.
Goal 9: industry, innovation and infrastructure	Target 9.A: "facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, the least developed countries, landlocked developing	The summary of existing initiatives in the area of human settlements and adaptation, prepared under the NWP, provides an overview of global and regional initiatives that can help countries and cities to learn about adaptation and climate-resilient urban planning and infrastructure development as well as access technical support and financing to implement their policies, programmes and projects. The adaptation knowledge portal provides a one-stop platform for over 100 knowledge products ranging from case studies on green infrastructure, through climate

Goal	*Target*	*Nairobi work programme activities*
	countries and small island developing States"	impact assessment tools, to scientific papers on sector perspectives on impacts and climate adaptation.
Goal 11: sustainable cities and communities	Target 11.3: "by 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries"	The summary of existing initiatives in the area of human settlements and adaptation, prepared under the NWP, provides an overview of global and regional initiatives that can help countries and cities to learn about adaptation and climate-resilient urban planning and infrastructure development as well as access technical support and financing to implement their policies, programmes and projects.
	Target 11.B: "substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change"	The secretariat and ICLEI – Local Governments for Sustainability jointly held an event in May 2017 to catalyse climate resilience action in human settlements through knowledge. The secretariat's adaptation knowledge portal also continues to serve as a knowledge hub on sustainable and resilient cities.
Goal 13: climate action	Climate action	The secretariat continues to facilitate knowledge-sharing for climate action. For example, at the 12th meeting of the Adaptation Committee the secretariat presented its findings on the landscape of platforms providing technical support on adaptation to developing country Parties.
Goals 14 and 15: life below water and on land	Targets 14.2, 15.1 and 15.4: ensure the conservation, restoration and sustainable use of ecosystems and their services	The synthesis report on ecosystems and water resources provides substantial evidence of the benefits of ecosystem-based adaptation. The secretariat convened a side event (see http://www4.unfccc.int/sites/NWP/News/Pages/Outcomes-of-Ecosystems-Side-Event.aspx) in May 2017 with the Least Developed Countries Expert Group and members of the Friends of Ecosystem-based Adaptation network highlighting the role of healthy ecosystems in helping life better adapt to climate change.

Abbreviations: LAKI = Lima Adaptation Knowledge Initiative, NWP = Nairobi work programme on impacts, vulnerability and adaptation to climate change